**Summary of Key Briefing Points** 

1030-1130am MST Thu February 4, 2016

### **Current Conditions as of Thur 12Z-15Z February 4**

### **Tropics and Mid-latitudes**

#### **Over the Tropical Pacific:**

- Convection: Mission domain 0-10N, 160W-150W quiet this morning.
- An area of active Convection in region 170W-160W, 0-3°N this morning.
- An area of active convection in region 145-135W, 3-7N this morning
- Strong radiating outflow from both convective regions evident in cloud track winds
- Westerly upper level flow to 8N, 160-150W, NW upper flow in mission domain poleward 170W-160W, 4-7°N.
- Water vapor image at 14Z THU shows dry intrudision to 5N in 160W-150W band

# **Tropical Outlook**

- Convection for Thus and Fri mostly quiet in Flight domain
  - ---- Confidence is somewhat high based on EC/GFS model agreement
  - ---- Confidence is high based on consistency of forecasts among successive Initializations

- By 00Z SUN 7 FEB (Sat aftn HNLT), some convection expected in FD
  - ---- No indication at this time from models of organized convection in FD for Sat aft
- --- in summary, the indication from THU forecasts is for Convection to be reduced considerably by THU and FRI, and still quite

limited on Sat, likely of a more isolated character in FD

# Midlatitude Conditions/Outlook

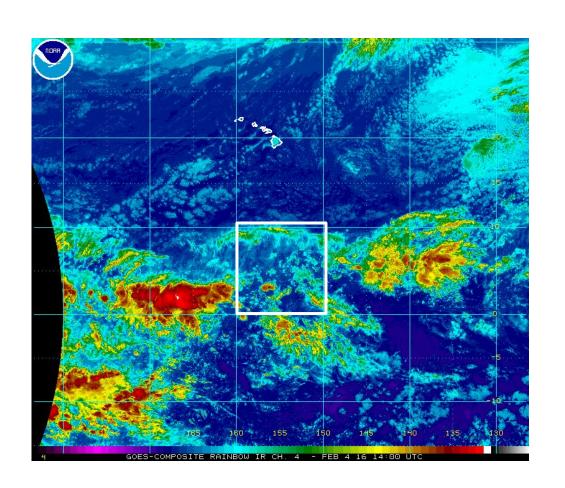
#### **Short Term:**

- CA mostly quiet
- Weak frontal rains in north mid-week, otherwise dry
- 8-station NSierra index on 31 Jan is 121%, 5-station CSierra index is 124%, Tulare Basin Index: 128%

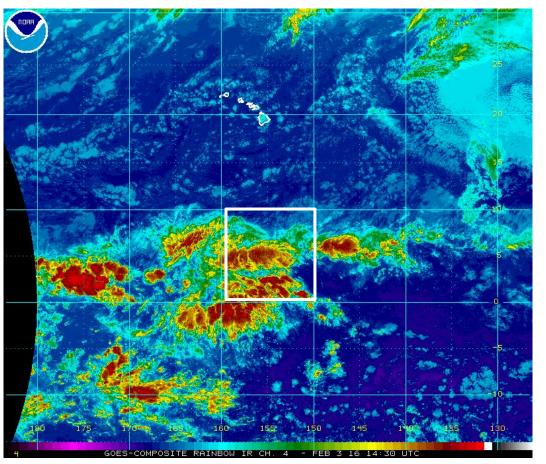
#### **Medium - Long Term:**

- Day 0-7 accumulated pcpn for CA shows little pcpn
- CPC 6-10 day (Feb 7-11) pcpn probabilities have high probabilities of below normal statewide
- Days 7 -10 fcsts from 00 TUE 2 Feb runs indicate sharp WCOASt Ridge
   ----confidence high (strong model agreement) that Tue 9 Feb thru Fri 12 Feb to be quiet in CA and NE Pacific
- Day 8-15 Calibrated Pcpn for CA (00Z Mon fcst) indicates a change, with above normal risks for >2" rainfall in region from SFO to SAN.
  - --- confidence low given poor model performance in prior long lead predictions.

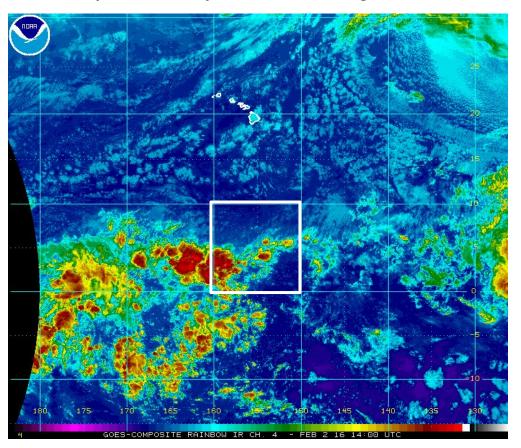
**THU 14Z February 4 Enhanced IR Image** 



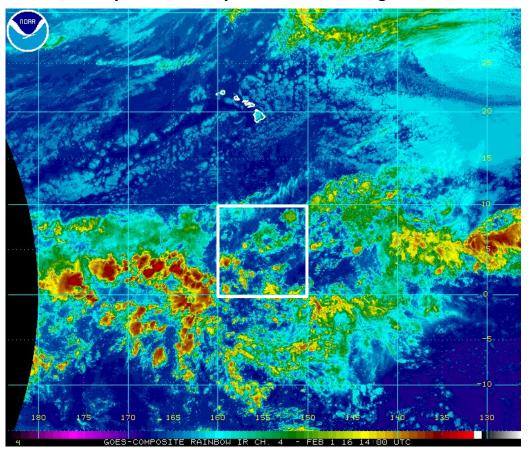
Wed 1430Z February 3 Enhanced IR Image



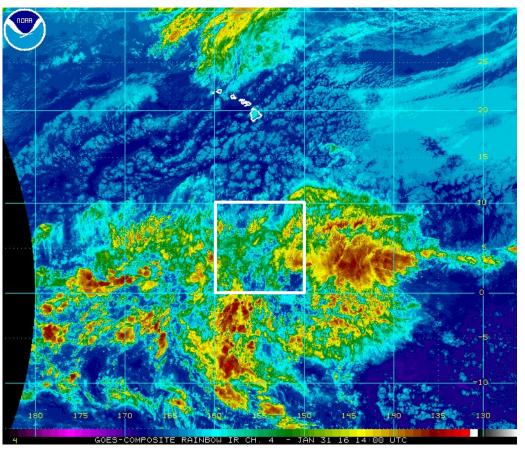
**Tuesday 14Z February 2 Enhanced IR Image** 



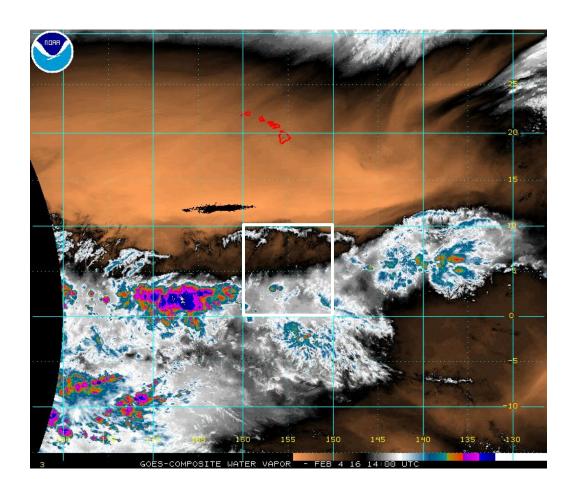
Monday 14Z February 1 Enhanced IR Image



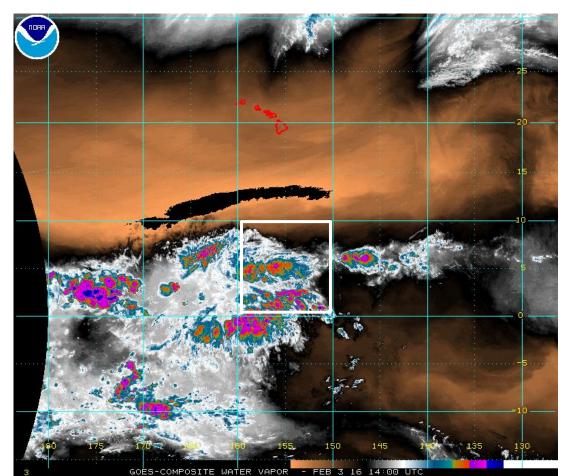
**Sunday 14Z January 31 Enhanced IR Image** 

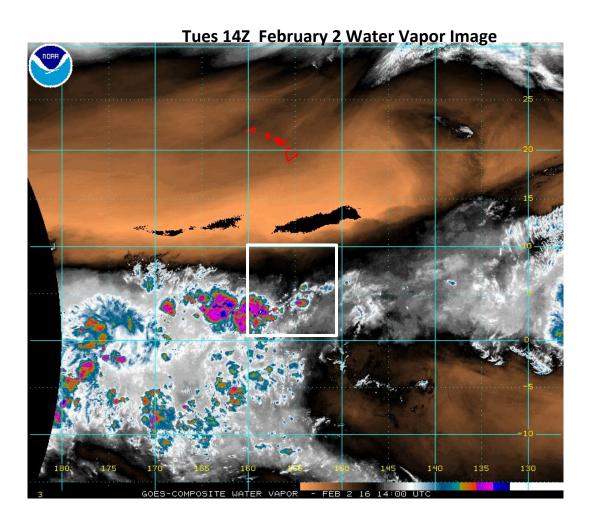


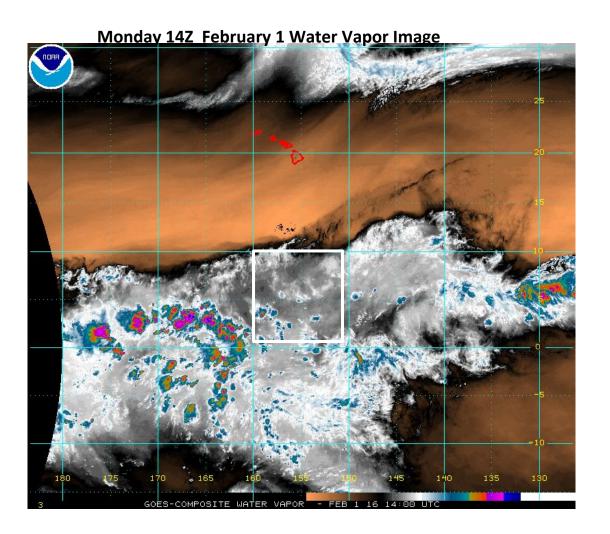
Thu 14Z February 4 Water Vapor



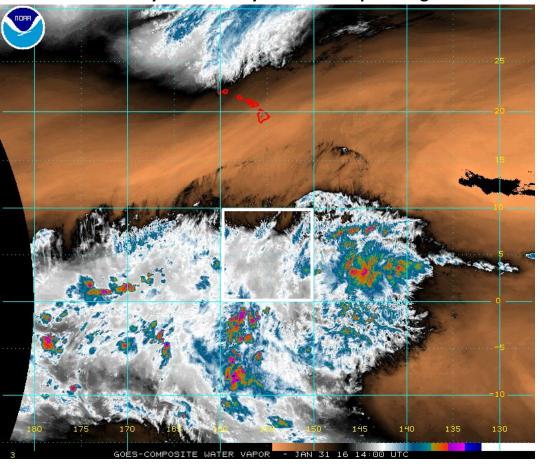
#### Wednesday 14Z February 3 Water Vapor



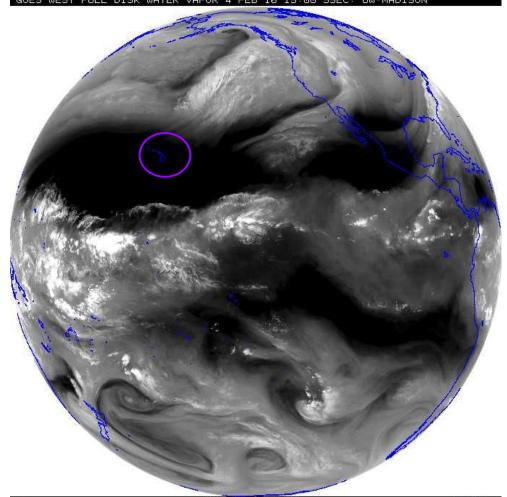


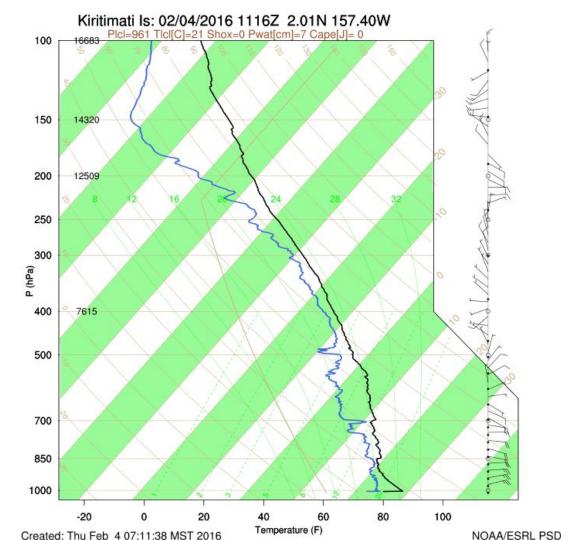


**Sunday 14Z January 31 Water Vapor Image** 

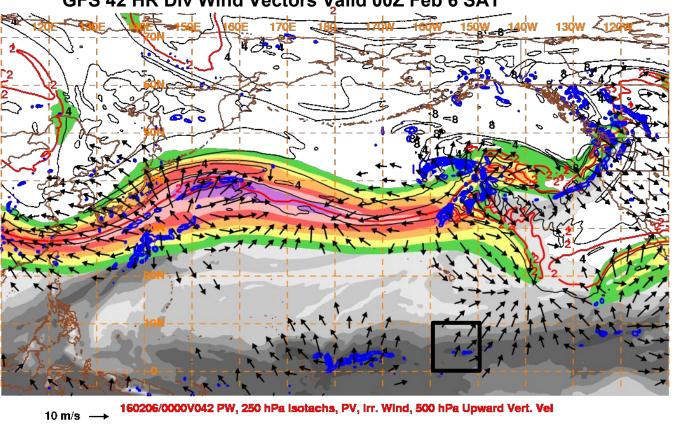


### THU 15Z February 4 GOES West Water Vapor Image GOES WEST FULL DISK WATER VAPOR 4 FEB 16 15:00 SSEC: UW-MADISON



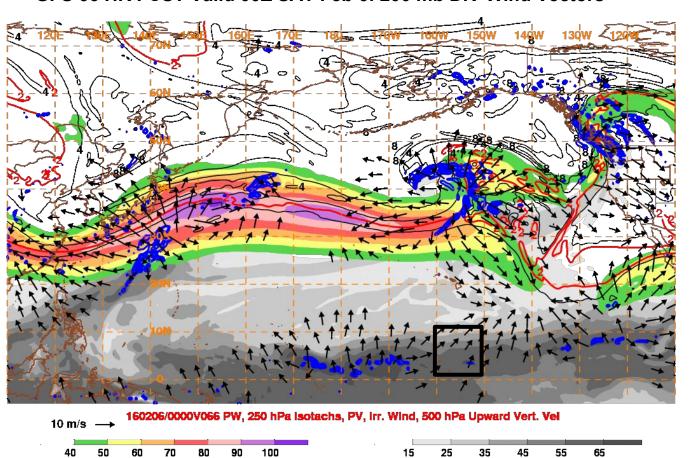


GFS 42 HR Div Wind Vectors Valid 00Z Feb 6 SAT

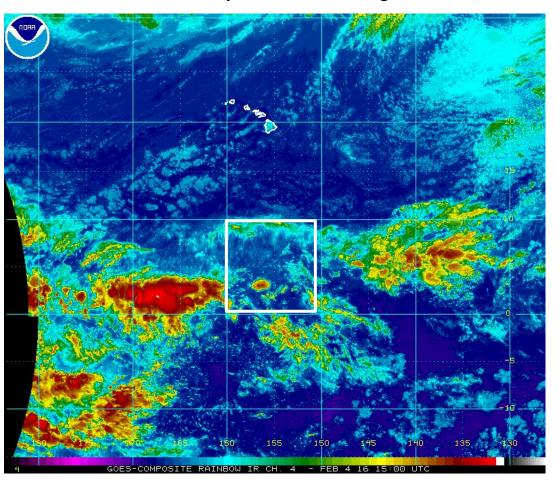




#### GFS 66 HR FCST Valid 00Z SAT Feb 6: 200 mb DIV Wind Vectors



**THU 15Z February 4 Enhanced IR Image** 



GFS Simulated IR Brightness Temperature (°C) Init: 12z Feb 04 2016 Forecast Hour: [12] valid at 00z Fri, Feb 05 2016 Levi Cowan | tropicaltidbits.com 40N --10 -20 20N --30 -40 -50 EQ. -60 -70 -80 20S 160E 120W 180 160W 140W

GFS Simulated IR Brightness Temperature (°C)
Init: 12z Feb 04 2016 Forecast Hour: [36] valid at 00z Sat, Feb 06 2016 Levi Cowan | tropicaltidbits.com 40N -10 -20 20N --30 -40 -50 EQ -60 -70 -80 160W 120W 180 140W

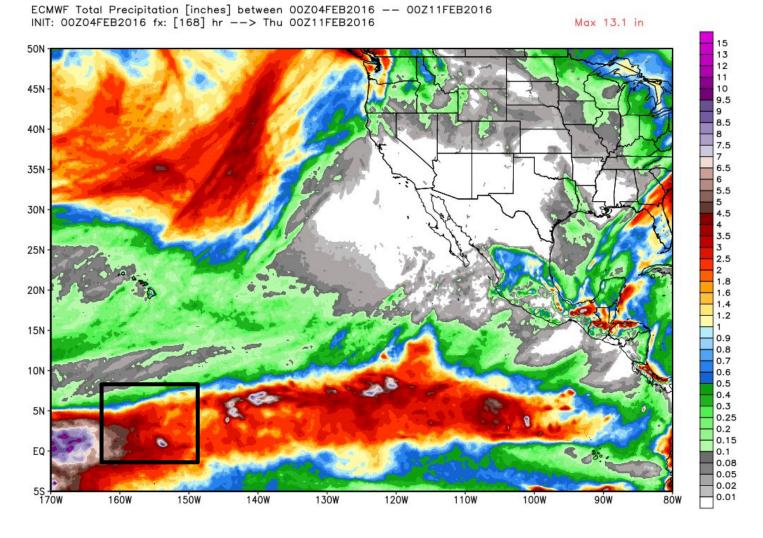
GFS Simulated IR Brightness Temperature (°C) Init: 12z Feb 04 2016 Forecast Hour: [60] valid at 00z Sun, Feb 07 2016 Levi Cowan | tropicaltidbits.com 40N --10 -20 20N --30 -40 -50 EQ -60 -70 -80 20S 160E 120W 180 160W 140W

ECMWF 6-hourly Precipitation [inches] between 18Z04FEB2016 -- 00Z05FEB2016 & MSLP [hPa] INIT: 00Z04FEB2016 fx: [024] hr --> Fri 00Z05FEB2016 Courtesy WeatherBell: Latest ECMWF 24HR Fcst Valid 00Z FRI 3 50N T 2.8 2.6 2.5 45N 2.4 1002. 2.3 2.2 -1008-2.1 40N 2 1.9 1.8 35N 1.7 1.6 1.5 1.4 30N 1.3 1.2 1.1 25N -0.95 0.9 0.85 20N 0.8 0.75 0.7 15N -0.65 0.6 0.55 10N 0.5 1008 0.45 0.4 0.35 5N 0.3 0.25 0.2 EQ-0.15 0.1 0.05 0.02 5S - 170W 0.01 160W 150W 140W 130W 120W 110W 100W 9ÓW 80W

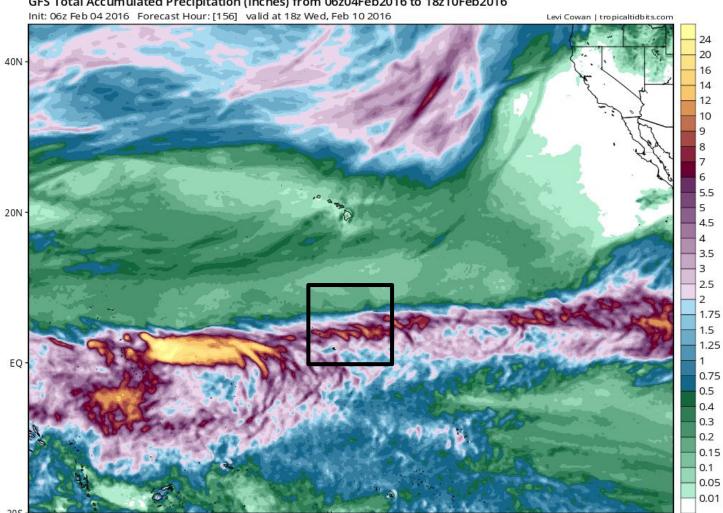
ECMWF 6-hourly Precipitation [inches] between 18Z04FEB2016 -- 00Z05FEB2016 & MSLP [hPa] INIT: 00Z02FEB2016 fx: [072] hr --> Fri 00Z05FEB2016 Courtesy WeatherBell: Prior ECMWF 72 HR Fcst Valid 00Z FRI 50N T 2.8 2.6 2.5 45N 2.4 1002 2.3 2.2 2.1 1008 40N 2 026 1.9 1.8 35N 1.7 1.6 1.5 1.4 30N 1.3 1026 1.2 1.1 25N 0.95 0.9 0.85 20N 0.8 0.75 0.7 15N -0.65 0.6 0.55 10N -0.5 0.45 0.4 0.35 5N 0.3 0.25 0.2 EQ-0.15 0.1 **1008** 0.05 0.02 5S-0.01 160W 150W 140W 130W 120W 110W 100W 9ÓW

ECMWF 6-hourly Precipitation [inches] between 18Z05FEB2016 -- 00Z06FEB2016 & MSLP [hPa] INIT: 00Z04FEB2016 fx: [048] hr --> Sat 00Z06FEB2016 Courtesy WeatherBell: Latest ECMWF 48 HR Fcst Valid 00Z Sat 3 2.8 2.6 2.5 45N 2.4 2.3 2.2 2.1 40N -2 1.9 1.8 35N 1.7 1.6 1.5 1.4 30N -1.3 1026 1020 1.2 1.1 25N -0.95 0.9 0.85 20N -0.8 0.75 0.7 15N -0.65 0.6 0.55 0.5 10N -0.45 0.4 0.35 5N -0.3 0.25 1008 0.2 EQ-0.15 0.1 0.05 0.02 5S-0.01 160W 150W 140W 130W 120W 110W 100W 9ÓW 80W

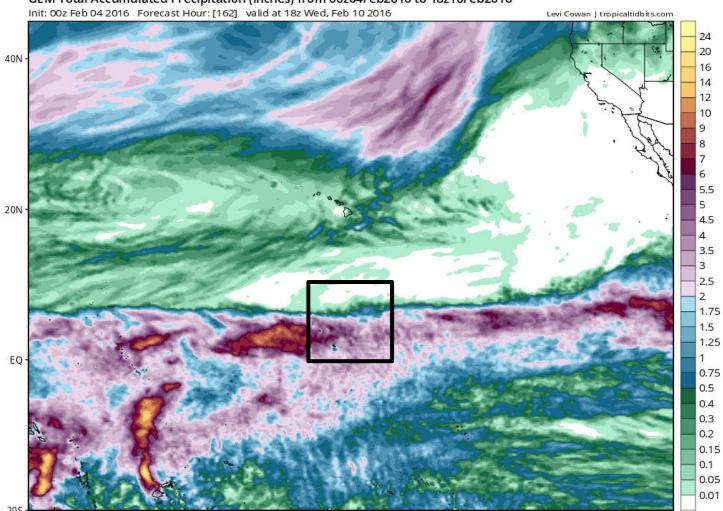
ECMWF 6-hourly Precipitation [inches] between 18Z06FEB2016 -- 00Z07FEB2016 & MSLP [hPa] INIT: 00Z04FEB2016 fx: [072] hr --> Sun 00Z07FEB2016 Courtesy WeatherBell: Latest ECMWF 72 HR Fcst Valid 00Z SUN 3 50N 7 2.8 2.6 2.5 45N -2.4 2.3 2.2 2.1 40N 2 1002-1.9 1.8 35N 026 1.7 1.6 1.5 1026 1.4 30N 1.3 1.2 1.1 25N 1020 0.95 0.9 0.85 20N -0.8 0.75 0.7 15N -0.65 0.6 0.55 0.5 10N -0.45 0.4 0.35 5N 0.3 0.25 0.2 EQ 0.15 0.1 0.05 0.02 5S-0.01 160W 150W 140W 130W 120W 110W 100W 9ÓW 80W

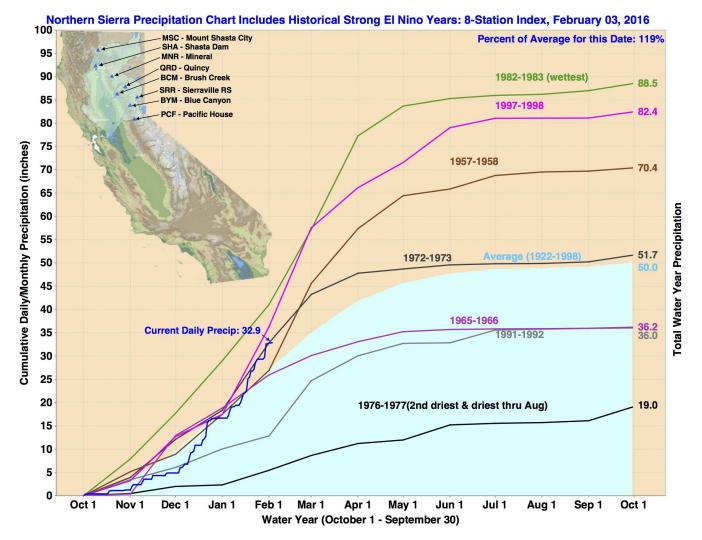


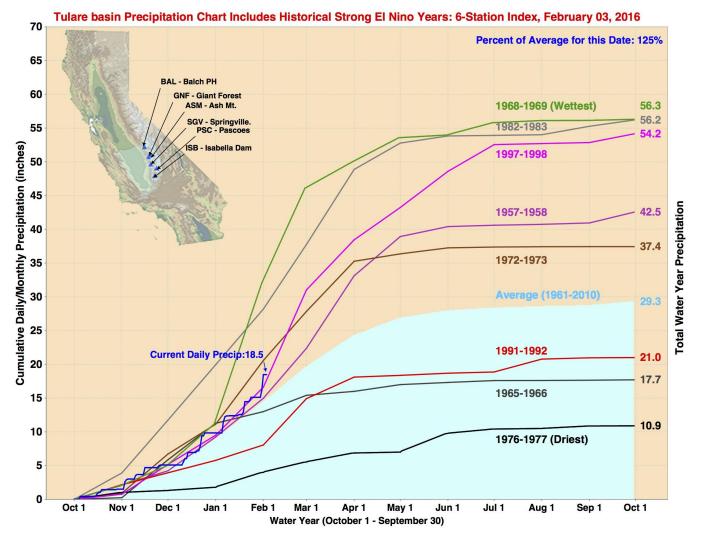
#### GFS Total Accumulated Precipitation (inches) from 06z04Feb2016 to 18z10Feb2016

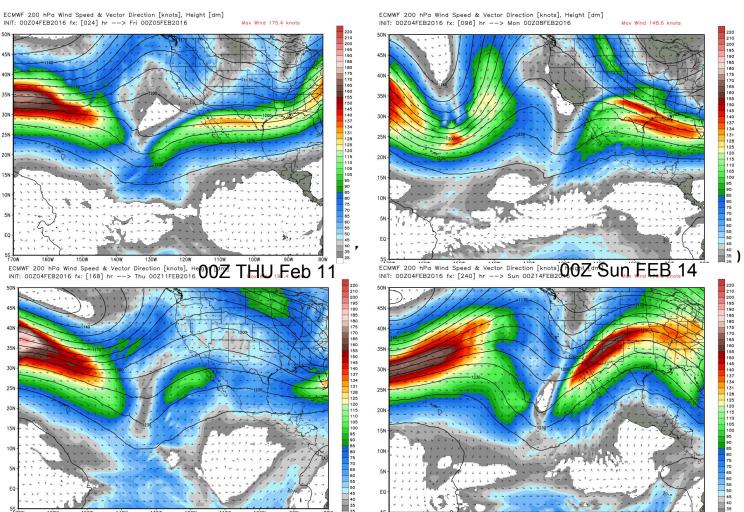


#### GEM Total Accumulated Precipitation (inches) from 00z04Feb2016 to 18z10Feb2016







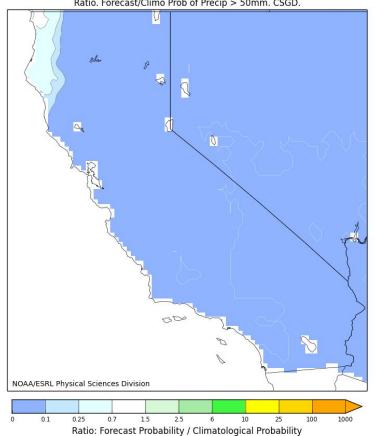


#### **Medium - Long Range Forecast**

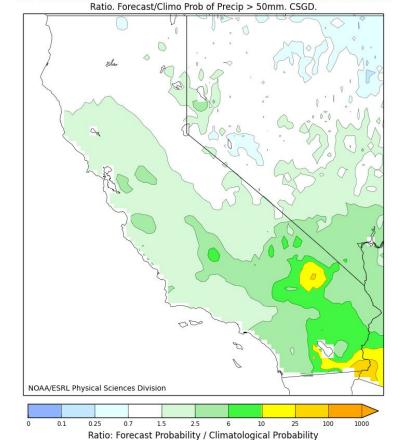
#### ESRL-Calibrated Reforecast Pcpn: Day 0-7 and 8-15 Day Fcst

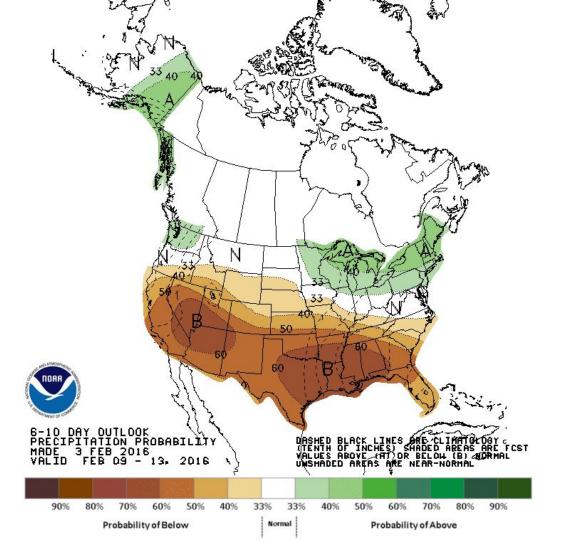
(from the 00Z WED3 FEB ensembles of the experimental reforecast system)

000-168hr fcst from 00Z Wed Feb 03. Valid 00Z Wed Feb 03 - 00Z Wed Feb 10
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.



198-360hr fcst from 00Z Wed Feb 03. Valid 06Z Thu Feb 11 - 00Z Thu Feb 18





## <u>Day 7-10 Initialized 00Z THU 04 Feb</u>

